

AMENDMENTS TO THE SPECIFICATION

The paragraph beginning on page 4, line 23 and the next paragraph are replaced with the two paragraphs amended as shown below and a new paragraph is added thereafter as follows.

Fig. 2B is a graph showing a simulation waveform of an output voltage of the operational amplifier having the voltage follower connection when the non-reverse input voltage of 3.3 V is applied on the non-reverse input terminal and if the output terminal is short-circuited to the power line; and

Fig. 3 is a view showing an electrical structure of a driving unit and an output unit of a conventional operational amplifier; and

Fig. 4 is an electrical diagram showing the use of Field Effect Transistors (FETs) in place of the bipolar transistors in the circuit shown in Fig. 1, according to an embodiment of the invention.

The paragraph beginning on page 11, line 10, is replaced with the paragraph below amended as follows:

The voltage applied on the collector-emitter of the transistor Q27 and the voltage detecting circuit 22 is higher than the voltage V_r so that the Zener diode V_z turns on, causing the base current to flow in the transistor Q28. The base current turns on the transistor Q28 so that a part of the base current outputted from the transistor Q26 to the transistor Q27 is caused to flow through the transistor Q28 to the ground line 13. As a result, the base current of the transistor Q27 is reduced so that the collector potential (voltage) of the transistor Q27, in other words, the base potential of the transistor Q30 rises, regulating the output current I_{out} through the transistor Q30. The regulate regulation of the output current I_{out} allows the operational amplifier 11 to be protected from the short-circuit of the output terminal 24.

The paragraph beginning on page 14, line 24, is replaced with the paragraph below amended as follows:

Incidentally, in place of the bipolar transistors Q11-Q31 in Fig. 1, FETs Q11-Q31 (Field Effect Transistors) may be used, for example as shown in Fig.4. In this case, the base, emitter and collector of each of the bipolar transistors are changed into the gate, source and drain of each of the FETs. In addition, in this case, the control signal supplied from the differential amplifying circuit to the driving FET corresponding to the transistor Q27 is referred to as gate control signal, and the control signal regulating circuit corresponding to the circuit 23 bears a part of the voltage supplied from the differential amplifying circuit for a period that the signal harness corrected to the output terminal 24 is short-circuited to the power harness, thereby reducing the gate voltage signal corresponding to the control signal applied on the driving FET.